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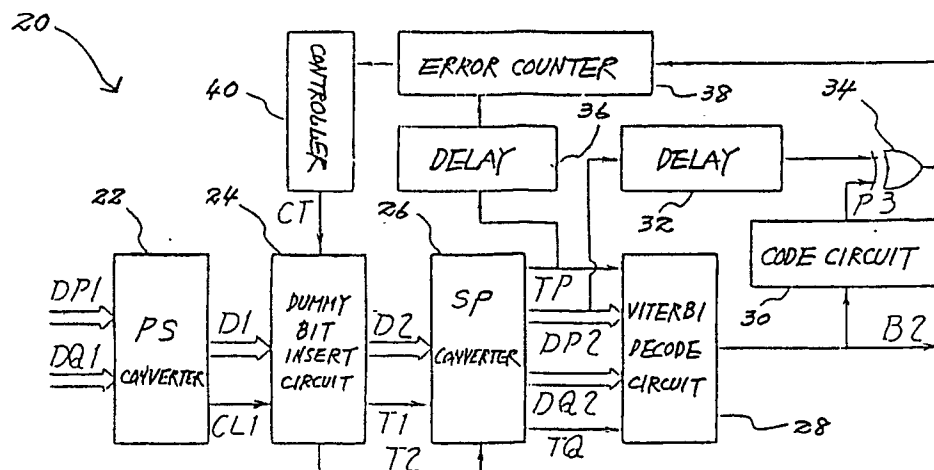
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29.08.90 Bulletin 90/35(71) Applicant: NEC CORPORATION
7-1, Shiba 5-chome Minato-ku
Tokyo 108-01(JP)(72) Inventor: Yagi, Toshiharu
c/o NEC Corporation 33-1 Shiba 5-chome
Minato-ku Tokyo(JP)(74) Representative: Vossius & Partner
Siebertstrasse 4 P.O. Box 86 07 67
D-8000 München 86(DE)

(54) Decoder.

(57) A decoder is capable of decoding on a maximum likelihood basis coded symbols of equivalently high coding rate which are produced by deleting those code bits which are located at particular positions in a time sequence of convolutional symbols of low coding rate. The decoder includes a serial-to-parallel (SP) converter for converting a serial data sequence from a dummy bit inserter into parallel sequences. The frequency division phase of the SP converter is

determined by a second timing signal which the dummy bit inserter produces in synchronism with a dummy bit insertion phase. As code synchronization is established, frequency division phase synchronization is automatically established. This eliminates the need for the repetitive trial for frequency division phase synchronization only and thereby reduces a synchronization capture time.

FIG. 3



EP 0 310 057 A3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CL4)
A	SIXTH INTERN. CONF. ON DIGITAL SATELLITE COMMUNICATION, PHOENIX, US 23 September 1983, NEW-YORK, US pages 1224 - 1231; YUTAKA YASUDA & AL.: "DEVELOPMENT OF VARIABLE RATE VITERBI DECODER AND ITS PERFORMANCE CHARACTERISTICS" * the whole document *	1, 2	H03M13/12
A	PATENT ABSTRACTS OF JAPAN vol. 10, no. 16 (E-375)(2073) 22 January 1986, & JP-A-60 177732 (FUJITSU K.K.) 11 September 1985, * the whole document *	1, 2	
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A	EP-A-227473 (NIPPON TELEGRAPH AND TELEPHONE CORPORATION)		H03M G06F H04L
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A	US-A-3872432 (OTTO HERBERT BISMARCK)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 JUNE 1990	Examiner DEVERGRANNE C.
CATEGORY OF CITED DOCUMENTS			
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DOCUMENTS CONSIDERED TO BE RELEVANT			
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A	EP-A-233788 (SONY CORPORATION) ----		
A	GB-A-2123655 (NEC CORPORATION) ----		
A	US-A-4583078 (AJIT SHENOY) -----		
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The present search report has been drawn up for all claims			
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